



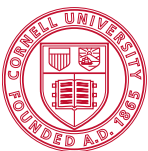
## *Crop Update for September 25, 2014*



**WELCOME FALL!**



With harvest getting into full swing in the Lake Erie region, the LERGP Crop Update will be going to a biweekly distribution. This will be the last weekly Crop Update until we approach the 2015 growing season. We will continue to provide Luke's updates on Brix accumulation at the vineyards in the nine site study, as well as, the weather update of NEWA information on a weekly basis. This information will be included with the weekly email announcing the latest issue of *Veraison to Harvest*.

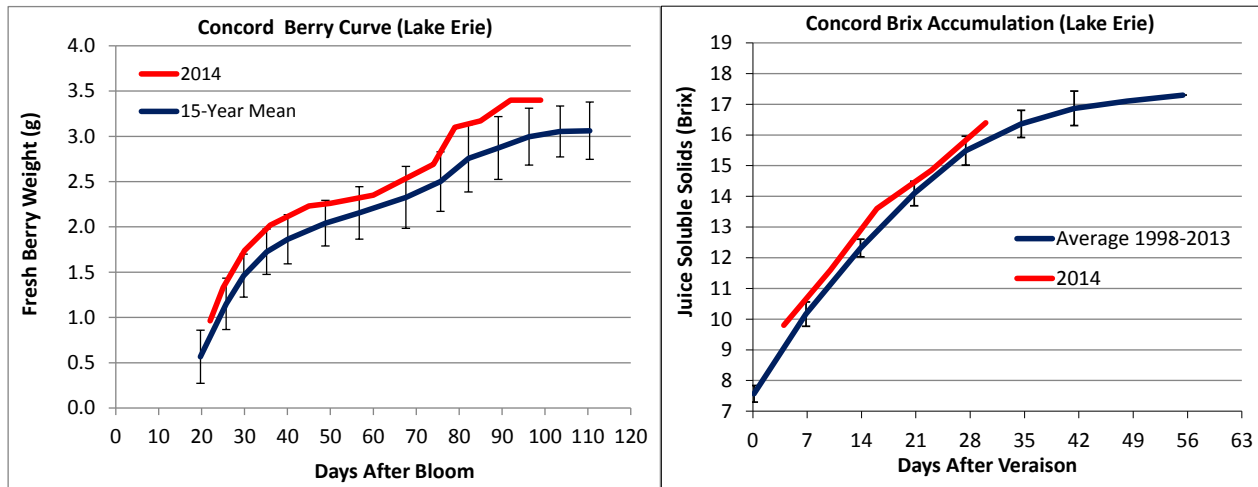


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## Concord Berry Curve

Concord at CLEREL is 100 days past bloom and 30 days past veraison. Mean berry weight in our phenology plot has plateaued at 3.4 grams fresh weight. At 30 days after bloom, we predicted final weight to be between 3.2 and 3.4 grams and the high precipitation and vine water status has pushed that to the high side. From this point on, berry weight is more difficult to predict. Water gain or loss through the berry skin and waxy cuticle or water flow in and out of the berry through the pedicel can be erratic in the aging berries. Juice soluble solids continue to slightly outpace the average and the sunny/dry conditions this week should continue to help that trend for next week and into the start of harvest.



We establish sampling protocols in our field plots which aim to increase our confidence in what is happening in the whole field. Once in a while we run across a fun oddity not reflected by the reported mean. This week Paula and Madonna found a 10.89 gram Concord berry in their sample cups! My guess is that the fruit from this cluster is a tetraploid, having double the genetic material as a normal Concord berry.





## Pre Harvest Numbers & Nutrient Deficiencies

Sampling data for the 9-site study collected by Kelly Link and our CLEREL staff shows another jump in brix for ‘Concord’ this past week. The averaged brix from the regions’ 80 sample sites shows that the total average increased from 13.7 to 15.1 °brix (1.4). To follow veraison to harvest for other grape cultivars see weekly updates at

<http://grapesandwine.cals.cornell.edu/newsletters/veraison-harvest>

This is a great time of year to look for nutrient deficiencies and foliar disorders in the vineyard. Now that harvest is moving into full swing you have a chance to get a good look at your entire vineyard as you harvest. Potassium and magnesium are two of the more noticeable deficiencies found on leaf. Magnesium deficiency show chlorosis or yellowing in leaf while the area close to the main veins stays green (Picture 1). Magnesium deficiency most often occurs in soils that have a pH below 5.5 where potassium becomes more available.

Lake Erie Region Average Concord Soluble Solids	
Location	BRIX
E. Rt5	14.4
E.Rt 20	15.3
E. Escarpment	15.1
C. Rt 5	14.7
C. Rt 20	15.8
C. Escarpment	16.2
W. Rt 5	15.2
W. Rt 20	14.7
W. Escarpment	14.5
Samples Taken on 9/22/14	



Picture 1. Magnesium deficiency in Concord

Potassium plays an important role in many regulatory plant biochemical functions including carbohydrate or sugar production. Sever potassium deficiency will show necrotic or dead leaf tissue and have scorched appearance (Picture 2). Potassium deficiency can occur in soils that are high in calcium and magnesium and where potassium is less exchangeable.

# Weather Data

## Lake Erie Grape Region NEWA Weather Data

Location	Date	High (F)	Low (F)	Precip.Past 7 days (in)	Precip. SEPT.Total	Total Apr GDD
North East Lab, PA	9/24/14	75	52	0.14	3.06	2356
Harborcreek, PA	9/24/14	75	50	0.9	2.91	2396
North East Escarpment	9/24/14	75	51	0.14	3.02	2314
Ripley	9/24/14	75	50	0.09	3.41	2404
Portland Route 5	9/24/14	74	48	0.38	3.47	2373
Portland CLEREL	9/24/14	72	50	0.13	1.84	2312
Portland Escarpment	9/24/14	73	53	0.36	3.50	2320
Dunkirk	9/24/14	75	44	0.18	2.54	2249
Silver Creek	9/24/14	73	46	0.3	2.97	2281
Sheridan	9/24/14	76	46	NA	NA	NA
Versailles	9/24/14	75	45	NA	NA	2188
Appleton	9/24/14	72	45	0.18	1.38	2007
Somerset	9/24/14	74	46	0.24	1.81	2191
Appleton South	9/24/14	74	43	0.23	1.61	2089

Note: NA=Sensor Malfunction

[illegible]

## Watch the Days to Harvest Interval

Just a reminder that if you are still considering a pesticide application this fall, make sure to **READ THE LABEL** to determine the days to harvest interval of the product(s) you are using. Also, speak with your processor, wine maker, or any other purchaser of your grapes to find out if they have additional restrictions (such as not wanting late season sulfur applications).



## Sprayer Decontamination and Storage

If you are done spraying for the year, now would be a good time to get your sprayer cleaned and ready for the winter. Dr. Andrew Landers has provided some excellent advice in the 2014 NY & PA Pest Management Guidelines for Grapes (section 7.12 Decontaminating and Storing Crop Sprayers, pages 133 – 134). Some of this information can also be found on his website at <http://web.entomology.cornell.edu/landers/pestapp/grape.htm>. Select the link; Cleaning Sprayers After Use.

Putting some time into maintaining your sprayers this fall can lead to less frustration during the rush of next spring.

# From the North East, PA Lab

Bryan Hed, Research Support Technologist in Plant Pathology  
Penn State University

Weather: We have recorded 3.06 inches of rainfall so far in September (1-24). With dry weather in the forecast, we may end up drier than average for September. Our growing degree day total (gdd) from April 1 through September 24 is 2356.3. Though our heat accumulation for September is a bit low at our site at this point, the sunny forecast may put us close to average for September. Our Concord vines have jumped another degree brix over the past week and are ranging between low to mid 15s to low 16s, depending on crop load. Our Vignoles is currently at 22-23 brix. The weather forecast over the next few days looks to remain relatively dry and sunny to move the ripening process along and minimize rot development in rot prone wine varieties.



## LERGP Website Links of Interest:

Table for: Insecticides for use in NY and PA:

<http://lergp.cce.cornell.edu/submission.php?id=69&crumb=ipm|ipm>

Crop Estimation and Thinning Table:

[http://nygpadmin.cce.cornell.edu/pdf/submission/pdf65\\_pdf.pdf](http://nygpadmin.cce.cornell.edu/pdf/submission/pdf65_pdf.pdf)

Appellation Cornell Newsletter Index:

<http://grapesandwine.cals.cornell.edu/cals/grapesandwine/appellation-cornell/>

Veraison to Harvest newsletters:

<http://grapesandwine.cals.cornell.edu/cals/grapesandwine/veraison-to-harvest/index.cfm>

Go to <http://lergp.cce.cornell.edu/> for a detailed calendar of events.

Please remember to RSVP for those events that require one!



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Contact the Lake Erie Regional Grape Program if you have any special needs such as visual, hearing or mobility impairments.

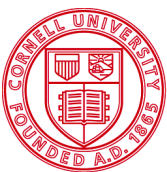
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